

Notice of Allowability

Application No.

10/084,477

Examiner

David Nhu

Applicant(s)

MITANI ET AL.

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/01/03.
2. ☒ The allowed claim(s) is/are 12, 13 and 19-32.
3. ☒ The drawings filed on 28 February 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/554,754.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |



EXAMINER'S AMENDMENT

1. Applicant's election of claims **12-13, 19-32** in paper No. 6 is acknowledged.

Because Applicant did not distinctly and specifically point out the supposed error in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). **Applicant have the right to file a divisional application covering the subject matter of the non-elected claims 14-18.**

The traversal is on the ground(s) that see the election paper. This is not found persuasive because the fields of search for method' and device claims are NOT coextensive and the determinations of patentability of method and device claims are different, that is process limitations and device limitations are given weight differently in determining the patentability of the claimed inventions. Also, the strategies for doing text searching of the device claims and method claims are different. Thus, separate searches are required.

The requirement is still deemed proper and is therefore made **FINAL**.

2. An examiner's amendment to the record appears below. Should the change and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Cancel claims 14-18.

REASONS FOR ALLOWANCE

3. Claims 12-13, 19-32 are allowed.

4. The following is an examiner's statement of reasons for allowance: None of the references of record teaches or suggests as cited in independent claims 12, 13, 19, 20, 21, 22, 23, 31: applying a potential lying in a direction to induce an electrical charge of conduction type opposite to a channel formed in a surface layer of the channel forming region of said TFT, in a lower portion of the channel forming region thereof to said body electrode and said back gate electrode or at least said back gate electrode so as to increase a threshold voltage of said TFT (as cited in claim 12); applying a potential lying in a direction to induce an electrical charge of conduction type opposite to a channel formed in a surface layer of the channel forming region of said TFT, in a lower portion of the channel forming region thereof to said body electrode and said back gate electrode so as to stabilize a threshold voltage of said TFT and increase a withstand voltage of the drain thereof (as cited in claim 13); applying a potentials to the body electrode and the back gate electrode so as to increase threshold voltage of the TFT in an aging state for the semiconductor device (as cited in claim 19); applying potentials to the body electrode and the back gate electrode so as to increase threshold voltage of the TFT in a test state for measuring a leakage current (as cited in claim 20); applying potentials to the body electrode and the back gate electrode which charge with time such that the threshold voltage of the TFT is increased or decreased in accordance with changes in time (as cited in claim 21); applying potentials to the body electrode and the back gate electrode so as to increase threshold voltage of the TFT, wherein the TFT constitutes a predetermined circuit block, and activating another TFT constituting another circuit block at high speed in a state of being

brought to a low threshold voltage (as cited in claim 22); applying potentials to the body electrode and the back gate electrode so as to increase threshold voltage of the TFT (as cited in claim 23); driving a semiconductor device having a FET formed in a semiconductor layer provided an insulating layer, a body electrode electrically connected to a channel forming region of said FET, and a back gate electrode provided below the insulating layer in an opposing relationship to the channel region of said FET transistor, comprising steps of applying a first potential to the body electrode; and applying a second potential to the back gate electrode (as cited in claim 31).

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Masuda et al (6,063,686): Method of Manufacturing an Improved SOI Semiconductor Integrated Circuit Device.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Nhu, (703) 306- 5796. The examiner can normally be reached on Monday-Friday from 7:30 AM to 5:00 PM.

The examiner's supervisor, David Nelms can be reached on (703) 308-4910.

The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7382.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956

David Nhu 

October 12, 2003

